

## WHAT IS CLAIMED IS:

1       1. A data routing unit comprising:  
2           a data receiver;  
3           a data transmitter;  
4           a bridge circuit connected to supply data to said data  
5 receiver and to receive data from said data transmitter, said  
6 bridge circuit connected to at least one set of data input  
7 lines and at least one set of data output lines, said bridge  
8 circuit responsive to a header of a data packet received from  
9 said data transmitter or received from said at least one set  
10 of data input lines to selectively route said received data  
11 packet to (1) said data receiver circuit, (2) a selected set  
12 of said at least one data output lines, or (3) both said data  
13 receiver circuit and a selected set of said at least one set  
14 of data output lines dependent upon said header; and  
15           said data receiver generating an interrupt to said data  
16 transmitter to transmit predetermined response data upon  
17 detection of a predetermined receiver event in said data  
18 packet.

1       2. The data routing unit of claim 1, wherein:  
2           said data transmitter transmits a transmitter receipt  
3 signal back to a source of said data packet upon detection of  
4 said predetermined receiver event.

1       3. The data routing unit of claim 1, further comprising:  
2           an input/output memory connected to said data receiver  
3 for storing data received by said data receiver and to said

4 data transmitter for storing data to be transmitted by said  
5 data transmitter, said input/output memory further storing  
6 transmitter scripts for controlling data transmission by said  
7 data transmitter;  
8 said data transmitter executing a transmitter script  
9 stored at a predetermined location within said input/output  
10 memory upon interruption by said data receiver.

1       4. The data routing unit of claim 3, wherein:  
2           said data receiver stores a portion of said received data  
3 packet as a transmitter script at said predetermined location  
4 within said input/output memory.

1       5. The data routing unit of claim 3, wherein:  
2           said data receiver stores a portion of said received data  
3 packet at said predetermined location within said input/output  
4 memory as a pointer to a transmitter script; and  
5           upon receipt of said interrupt said data transmitter  
6 executes said transmitter script located within said  
7 input/output memory corresponding to said pointer.